

# Department of Defense Occupational Information System

Armed Forces Epidemiological  
Board

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# Objectives

1. List the Information Technology tools which have been and will be available to the Occupational Medicine practitioner for executing a comprehensive Occupational Health program.
2. Summarize the flow of information and personnel through the process of an Occupational Medicine surveillance/certification clinical encounter.
3. Accomplish an Occupational Medicine surveillance/certification clinical encounter using CHCSII encounter templates.

# The Occ Doc's World

- Surveillance
  - Is the workplace making the worker unhealthy?
- Certification
  - Is a worker able to perform his/her job safely?
- Injury/Illness Care
  - Fitness-for-Duty
  - Worker's Compensation
- Epidemiology/Research

# OSH Life Cycle

- **Industrial Hygienist**
  - Identifies hazardous tasks or workplaces
    - Similar Exposure Group (SEG)
  - Recommends Control Measures
    - Engineering Controls
    - Administrative Controls
    - Personal Protective Equipment (PPE)
  - Recommends Hazard-Based Medical Surveillance
- ◆ Recommendations are made to the supervisor.

# OSH Life Cycle

- **Supervisor** (delegate of Commanding Officer)
  - Responsible for providing a safe/healthful workplace
  - Identifies which individuals perform the hazardous task or work in the hazardous location
  - Executes and enforces the recommended controls
  - Enrolls individuals into appropriate medical surveillance/certification programs
- **Safety** assists the supervisor as needed.

# OSH Life Cycle

- **Occupational Medicine**

- Examines the individual employee
  - Documentation in medical record
- Recommends to the supervisor
  - QUALIFIED or NOT MEDICALLY QUALIFIED
  - Restrictions and/or accommodations
- Detects trends in populations
  - Report to Supervisor, Safety, Industrial Hygiene

# Current Technology

- IH generates written report
  - Individual-specific sampling data is captured on an SF-600 and placed in medical record.
  - Otherwise, sampling data is in the report and might also be captured in a database.
- Enrollment of individuals into surveillance programs is managed using local databases or service-specific systems.

# Current Technology

- Occupational Medicine Clinical Business
  - The examination should be stressor-specific
    - History, Labs, X-rays, Tests, Physical Examination
  - Documentation of the clinical encounter
    - SF-600, Provider-GUI, CHCSII
  - Taking credit for clinical workload
    - CHCS ADM, P-GUI, CHCSII
  - Feedback to Supervisor, Safety, and IH
    - Dispensary Permit, Physician's Written Opinion, Local Database, Phone, E-mail



# Current and Future Technology

- Defense Occupational and Environmental Health Readiness System (DOEHRS)
  - DOEHRS-Hearing Conservation (HC)
  - DOEHRS-Industrial Hygiene (IH)
  - DOEHRS-Data Repository (DR)
- CHCSII
  - Occupational Medicine Encounter Templates
  - Interface/Integrate with DOEHRS

# DOEHRS-HC

- Benefits the Clinician
  - Occupational Medicine Provider & Audiologist
    - Standardized, typed, archived DD2215 and 2216
    - Calculation of Threshold Shift (hearing loss)
    - Recommendation for follow-up or referral
    - Access to historical audiograms without record
- Benefits the Epidemiologist/Researcher
  - Individuals and populations with STS
  - Individuals and populations with compensable hearing loss

# DOEHRS-IH

- Benefits the IH
  - Workplace Monitoring Plan (IH Survey)
    - Locations, Shops, Processes, Equipment, HAZMAT
    - Sampling (Air, Soil, Water) results
  - Controls
    - Engineering, Administrative, PPE
  - Similar Exposure Groups (SEG's)
  - References/Links to Toxicology data
    - NIOSH, ANSI, ASHRAE, MSDS, NFPA, Vendors

# DOEHRS-IH

- Benefits the Clinician
  - When assessing individuals with environmental or occupational stressors, use IH data and:
    - Biological Monitoring data (blood, urine, etc.)
    - History (Pre- and Post-Deployment questionnaire)
    - Physical Examination
- GOAL = Correct Diagnosis and Treatment Plan
- GOAL = Prevent Future Injury/Illness

# DOEHRS-IH

- Benefits the Epidemiologist/Researcher
  - Personnel data (DMDC)
    - Troop movements and unit locations
  - Exposure data (DOEHRS-IH)
    - SEG's, Environmental samples
  - Outcome data
    - Post-Deployment questionnaire
    - Diagnoses and Procedures (ICD-9, CPT)
    - Disability (Medical Boards), Death
    - Serum Repository
    - Mishap Investigation (Safety Center)
- GOAL = Exposure/Outcome Association

# Occupational Medicine Clinical Business

## Practices and CHCSII

- The Navy's Medical Matrix Manual\* has become the basis for a set of CHCSII Enterprise-level Encounter Templates
  - Army and Air Force representation
  - Peer-reviewed
- Multiple Stressors, One Encounter
- Standardized documentation (MEDCIN)
- Improved coding (ICD-9, E&M, CPT)

\* Navy Environmental Health Center (NEHC) Technical Manual OM 6260 (FEB 2001)

# DOEHRS and CHCSII

- Interface vs. Integrate
- IH and HC Data can exist in the Data Repository (DR) as long as that data can be accessed/viewed in the Electronic Medical Record (EMR)
- GOAL = Clinician has appropriate role-based access to OSH data to enhance clinical decision making and documentation

# Way Ahead...

- Reporting capability
  - Line Chain of Command – Readiness
  - Medical Chain of Command – Effectiveness
  - Epidemiologists – Prevention
- Data Quality = Consistent Definitions
  - SEG's, Processes, Equipment, PPE
  - Command, UIC, Base, Shop
  - Location – address, building #, GPS (GIS)



# Questions?

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